## 03 LOOSE TUBE CABLE FOR DUCT (STEEL ARMODED )

Cable structure


## - Featurs \& application

- For installations in duct, trenched or tunnel systems. All section water blocking provided reliable performance of moisture-proof and water block.
- Design allows sub cables to be routed to multiple locations such wiring racks and closets;
- For requirement of an extremely rugged and reliable cable design where maximun mechanical and enviromental protection is necessary.


## | Mechanical \& Environmental Characteristics

| SPECIFICATIONS | PARAMETERS |
| :--- | :--- |
| Number of optical fiber | $12 \mathrm{FO} \div 96$ Fo |
| Out sheath diameter | $11.0 \mathrm{~mm} \div 18.0 \mathrm{~mm}$ |
| Maximum load (installtion) | 2700 N |
| Maximum load (Operation) | 1350 N |
| Allowable crush load | $2000 \mathrm{~N} / 100 \mathrm{~mm}$ |
| Temperature ranger (installtion) | $-5^{\circ} \mathrm{C} \div 65^{\circ} \mathrm{C}$ |
| Temperature ranger (operation) | $-10^{\circ} \mathrm{C} \div 65^{\circ} \mathrm{C}$ |
| Bending Radius (installtion) | $10^{*} \mathrm{D}(\mathrm{D}=$ Cable diameter) |
| Bending Radius (operation) | $20^{*} \mathrm{D}$ ( $\mathrm{D}=$ Cable diameter) |
| Longevity | $\geq 15$ Years |

## - Identification

|  |  | TIA/EIA-598-A Compliance |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Blue | 2 | Orange | 3 | Green | 4 | Brown |
| 5 | Grey | 6 | White | 7 | Red | 8 | Black |
| 9 | Yellow | 10 | Violet | 11 | Pink | 12 | Aqua |

## - Optical Characteristics

| Specifications | Unit | Fiber tyle: SM-ITU-T G.652D |
| :---: | :---: | :---: |
| *. Geometrical characterstics |  |  |
| Mode field diameter at 1310nm | $\mu \mathrm{m}$ | $9.2 \pm 0.4$ |
| Cladding diameter | $\mu \mathrm{m}$ | $125 \pm 1$ |
| Core-clad concentricity | $\mu \mathrm{m}$ | $\leq 0.6$ |
| Cladding non-circularity | \% | $\leq 0.7$ |
| Coating diameter | $\mu \mathrm{m}$ | $\begin{aligned} & 245 \pm 10 \text { (none color) } \\ & 250 \pm 10 \text { (includding color) } \end{aligned}$ |
| *. Transmission characterstics |  |  |
| Attenuation at wavelength: $1310 \mathrm{~nm} \div 1625 \mathrm{~nm}$ | dB/km | $\leq 0.4$ |
| Attenuation at 1550 nm | dB/km | $\leq 0.22$ |
| Chromatic dispersion | ps/nm.km | $\leq 3.5$ at $1310 \mathrm{~nm} \quad \leq 18$ at 1550 nm |
| PMD index | $\mathrm{ps} / \mathrm{km}^{1 / 2}$ | $\leq 0.2$ |
| Zero dispersion wavelength | Nm | $1300 \leq \lambda 0 \leq 1324$ |
| Zero dispersion slope | ps/nm².km | $\leq 0.092$ |
| Cut-off wavelength | Nm | $\lambda \mathrm{cc} \leq 1260$ |
| Macrobend loss at 1625 nm (radius $=30 \mathrm{~mm}$ * 100 turns) | dB | $\leq 0.1$ |
| *. Mechanical characterstics |  |  |
| Proof stress | Gpa | $\geq 0.69$ |

## - Informations and parking

- The informations of the cable is printed per meter length complies with IEEE P1222. Other information will be printed as the request of customer.
- Standard length: 5000 m or is packed according to customer's requirements.

